Docket No.: ASZD-P01-599

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for treating colorectal or breast cancer in a warm blooded animal in need of such treatment, which comprises administering to said animal an effective amount The use-of a compound of formula (I)

$$R^{7}$$
 R^{8}
 R^{8}
 R^{8}
 R^{8}
 R^{1}
 R^{8}
 R^{6}
 R^{1}
 R^{1}
 R^{1}
 R^{1}
 R^{2}
 R^{3}
 R^{4}
 R^{1}
 R^{2}

or a salt, ester, or amide or prodrug thereof;

where X is O, or S, S(O) or S(O)₂, NH or NR¹² where R¹² is hydrogen or C₁₋₆alkyl; R⁵ is selected from a group NHC(O)OR⁹, NHC(O)R⁹, NHS(O)₂R⁹, C(O)R⁹, C(O)OR⁹, S(O)R⁹, S(O)OR⁹, S(O)₂OR⁹, C(O)NR¹⁰ R¹¹, S(O)NR¹⁰R¹¹, S(O)ONR¹⁰R¹¹; where R⁹, R¹⁰ or R¹¹ are independently selected from hydrogen, optionally substituted hydrocarbyl and optionally substituted heterocyclyl and R¹⁰ and R¹¹ together with the nitrogen atom to which they are attached may additionally form an optionally substituted heterocyclic ring which optionally contains further heteroatoms; R⁶ is hydrogen, optionally substituted hydrocarbyl or optionally substituted heterocyclyl;

R⁷ and R⁸ are independently selected from hydrogen, halo, C₁₋₄alkyl, C₁₋₄ alkoxy, C₁₋₄alkoxymethyl, di(C₁₋₄alkoxy)methyl, C₁₋₄alkanoyl, trifluoromethyl, cyano, amino, C₂₋₅alkenyl, C₂₋₅alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated (linked via a ring carbon or nitrogen atom) or unsaturated (linked via a ring carbon atom), and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C₁₋₃alkyl,

C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C₂₋₄alkanoyl, C₁4alkanovlamino, C₁4alkoxycarbonyl, C₁4alkylsulphanyl, C₁4alkylsulphinyl, C₁₋₄alkylsulphonyl, carbamoyl, N-C₁₋₄alkylcarbamoyl, N,N-di(C₁₋₄alkyl)carbamoyl, aminosulphonyl, N-C₁-alkylaminosulphonyl, N,N-di(C₁-alkyl)aminosulphonyl, C₁₋₄alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C₁₋₄alkoxycarbonyl, and R¹, R², R³, R⁴ are independently selected from halogeno, cyano, nitro, C₁₋₃alkylsulphanyl, -N(OH)R¹³- (wherein R¹³ is hydrogen, or C₁₋₃alkyl), or R¹⁵X¹-[[(]]wherein X¹ represents a direct bond, -O-, -CH₂-, -OCO-, carbonyl, -S-, -SO-, -SO₂-, -NR¹⁶CO-, -CONR¹⁶-, -SO₂NR¹⁶-, -NR¹⁷SO₂- or -NR¹⁸- (wherein R¹⁶, R¹⁷ and R¹⁸ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl), and R¹⁵ is hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy.[[;]]

in the preparation of a medicament for use in the inhibtion of aurora 2 kinase.

(Currently Amended) The methoduse according to claim 1 wherein in the compound of formula (I), at least one group R¹, R², R³, R⁴ is a group R¹⁵X¹- and R¹⁵ is hydrogen, an optionally substituted hydrocarbyl group selected from alkyl, alkenyl, alkynyl, aryl, aralkyl, cycloalkyl, cycloalkenyl or cycloalkynyl, or combinations thereof; or an optionally substituted heterocyclyl group of from 4 to 20 ring atoms, at least one of which is a heteroatom such as-oxygen, sulphur or nitrogen and where the optional substituents comprise at least one functional group selected from nitro, cyano, halo, oxo, =CR⁷⁸R⁷⁹, C(O)_xR⁷⁷, OR⁷⁷, S(O)_yR⁷⁷, NR⁷⁸R⁷⁹, C(O)NR⁷⁸R⁷⁹, OC(O)NR⁷⁸R⁷⁹, =NOR⁷⁷, -NR⁷⁷C(O)_xR⁷⁸, -NR⁷⁷CONR⁷⁸R⁷⁹, -N=CR⁷⁸R⁷⁹, S(O)_yNR⁷⁸R⁷⁹ or -NR⁷⁷S(O)_yR⁷⁸ where R⁷⁷, R⁷⁸ and R⁷⁹ are independently selected from hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy, or R⁷⁸ and R⁷⁹ together form an optionally substituted ring which optionally contains further heteroatoms such as oxygen, nitrogen, S, S(O) or S(O)₂, where x is an integer of 1 or 2, y is 0 or an integer of 1-3.

3. (Currently Amended) The methoduse according to claim 2 where hydrocarbyl, heterocyclyl or alkoxy groups R⁷⁷, R⁷⁸ and R⁷⁹ as well as rings formed by R⁷⁸ and R⁷⁹ are optionally substituted by halo, perhaloalkyl, mercapto, alkylthio, hydroxy, carboxy, alkoxy, heteroaryl, heteroaryloxy, cycloalkyl, cycloalkenyl, cycloalkynyl, alkenyloxy, alkynyloxy, alkoxyalkoxy, aryloxy (where the aryl group may be substituted by halo, nitro, or hydroxy), cyano, nitro, amino, mono- or di-alkyl amino, oximino or S(O)_yR⁹⁰ where y is as defined above and R⁹⁰ is a alkyl.

- 4. (Currently Amended) The <u>methoduse</u> according to any one of the preceding claims wherein in the compound of formula (I) at least one group R¹, R², R³ or R⁴ is a group X¹R¹⁵ and R¹⁵ is selected from one of the following twenty-two groups:
 - 1) hydrogen or C₁₋₅alkyl which may be unsubstituted or which may be substituted with one or more functional groups;
 - 2) $-R^aX^2C(O)R^{19}$ (wherein X^2 represents -O- or -NR²⁰- (in which R^{20} represents hydrogen, or alkyl optionally substituted with a functional group) and R^{19} represents C_{1-3} alkyl, -NR²¹R²² or -OR²³ (wherein R²¹, R²² and R²³ which may be the same or different each represents hydrogen, or alkyl optionally substituted with a functional group));
 - 3) -R^bX³R²⁴ (wherein X³ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR²⁵C(O)_s-, -C(O)NR²⁶-, -SO₂NR²⁷-, -NR²⁸SO₂- or -NR²⁹- (wherein R²⁵, R²⁶, R²⁷, R²⁸ and R²⁹ each independently represents hydrogen, or alkyl optionally substituted with a functional group and s is 1 or 2) and R²⁴ represents hydrogen, hydrocarbyl (as defined herein) or a saturated heterocyclic group, wherein the hydrocarbyl or heterocyclic groups may be optionally substituted by one or more functional groups and the heterocyclic groups may additionally be substituted by a hydrocarbyl group);
 4) -R^cX⁴R^{c'} X⁵R³⁰ (wherein X⁴ and X⁵ which may be the same or different are each -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR³¹C(O)_s-, -C(O)_xNR³²-, -SO₂NR³³-, -NR³⁴SO₂- or -NR³⁵- (wherein R³¹, R³², R³³, R³⁴ and R³⁵ each independently represents hydrogen or alkyl optionally substituted by a functional group and s is 1 or 2) and R³⁰ represents hydrogen, or alkyl optionally substituted by a functional group);

5) R³⁶ wherein R³⁶ is a C₃₋₆ cycloalkyl or saturated heterocyclic ring (linked via carbon or nitrogen), which cycloalkyl or heterocyclic group may be substituted by one or more functional groups or by a hydrocarbyl or heterocyclyl group which hydrocarbyl or heterocyclyl group may be optionally substituted by one or more functional groups;

- 6) -R^dR³⁶ (wherein R³⁶ is as defined hereinbefore);
- 7) ReR36 (wherein R36 is as defined hereinbefore);
- 8) -R^f R³⁶ (wherein R³⁶ is as defined hereinbefore);
- 9) R³⁷ (wherein R³⁷ represents a pyridone group, an aryl group or an aromatic heterocyclic group (linked via carbon or nitrogen) with 1-3 heteroatoms selected from O, N and S, which pyridone, aryl or aromatic heterocyclic group may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups);
- 10) -R^gR³⁷ (wherein R³⁷ is as defined hereinbefore);
- 11) -RhR³⁷ (wherein R³⁷ is as defined hereinbefore);
- 12) -Ri R37 (wherein R37 is as defined hereinbefore);
- 13) -R^j X⁶R³⁷ (wherein X⁶ represents -O-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁴²C(O)-, -C(O)NR⁴³-, -SO₂NR⁴⁴-, -NR⁴⁵SO₂- or -NR⁴⁶- (wherein R⁴², R⁴³, R⁴⁴, R⁴⁵ and R⁴⁶ each independently represents hydrogen, or alkyl optionally substituted with a functional group) and R³⁷ is as defined hereinbefore);
- 14) -R^kX⁷R³⁷ (wherein X⁷ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁴⁷C(O)-, -C(O)NR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹- (wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, or alkyl optionally substituted with a functional group) and R³⁷ is as defined hereinbefore);
- 15) -R^mX⁸R³⁷ (wherein X⁸ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁵²C(O)-, -C(O)NR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶- (wherein R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ each independently represents hydrogen, hydrogen, or alkyl optionally substituted with a functional group) and R³⁷ is as defined hereinbefore);
- 16) -Rⁿ X⁹Rⁿ'R³⁷ (wherein X⁹ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR⁵⁷C(O)-, -C(O)NR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹- (wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, hydrogen, or alkyl optionally substituted with a functional group) and R³⁷ is as defined hereinbefore);

- 17) -R^p X⁹-R^p'R³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore);
- 18) C₂₋₅alkenyl which may be unsubstituted or which may be substituted with one or more functional groups;
- 19) C₂₋₅alkynyl which may be unsubstituted or which may be substituted with one or more functional groups;
- 20) -R^tX⁹R^tR³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore);
- 21) -R^u X⁹ R^u'R³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore); and
- 22) R^v R⁶²(R^{v'})_q(X⁹)_rR⁶³(wherein X⁹ is as defined hereinbefore, q is 0 or 1, r is 0 or 1, and R⁶² is a C₁₋₃alkylene group or a cyclic group selected from divalent cycloalkyl or heterocyclic group, which C₁₋₃alkylene group may be substituted by one or more functional groups and which cyclic group may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups; and R⁶³ is hydrogen, C₁₋₃alkyl, or a cyclic group selected from cycloalkyl or heterocyclic group, which C₁₋₃alkyl group may be substituted by one or more functional groups and which cyclic group may be substituted by one or more functional groups or by a hydrocarbyl group optionally substituted by one or more functional groups or heterocyclyl groups, or by a heterocyclyl group optionally substituted by one or more functional groups or hydrocarbyl groups);

and wherein R^a , R^b , R^c , R^c , R^c , R^d , R^g , R^j , R^n , R^n , R^p , R^{p+1} , R^t , R^u , R^v and R^v are independently selected from C_{1-8} alkylene groups optionally substitued by one or more substituents functional groups,

R^e R^h, R^k and R^t are independently selected from C₂₋₈alkenylene groups optionally substituted by one or more functional groups, and

 R^f , R^u , R^m and R^u are independently selected from C_{2-8} alkynylene groups optionally substituted by one or more functional groups.

5. (Currently Amended) The methoduse according to claim 1[[4]] wherein in the compound of formula (I) at least one group R¹, R², R³ or R⁴ is a group X¹R¹⁵ and R¹⁵ is selected from one of the following twenty-two groups:

1) hydrogen or C_{1-5} alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, oxiranyl, fluoro, chloro, bromo, and amino, (including C_{1-3} alkyl and trifluoromethyl);

- 2) $-R^aX^2C(O)R^{19}$ (wherein X^2 represents -O- or $-NR^{20}$ (in which R^{20} represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and R^{19} represents C_{1-3} alkyl, $-NR^{21}R^{22}$ or $-OR^{23}$ (wherein R^{21} , R^{22} and R^{23} which may be the same or different each represents hydrogen, C_{1-5} alkyl, hydroxy C_{1-5} alkyl or C_{1-3} alkoxy C_{2-3} alkyl));
- 3) $-R^bX^3R^{24}$ (wherein X^3 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-, -NR²⁵C(O)_s-, -NR²⁵C(O)NR²⁶-, -C(O)NR²⁶-, -SO₂NR²⁷-, -NR²⁸SO₂- or -NR²⁹- (wherein R²⁵, R²⁶, R²⁷, R²⁸ and R²⁹ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl and s is 1 or 2) and R²⁴ represents hydrogen, C₁₋₆alkyl, C₂₋₆alkenyl, or a cyclic groups selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₆alkyl group may bear 1, 2 or 3 substituents selected from oxo, hydroxy, halogeno, cyclopropyl, amino, C₁₋₄alkylamino, di-C₁₋₄alkylamino, C₁₋₄alkylthio, C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C₁₄cyanoalkyl, C₁₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁-alkoxycarbonyl, C₁-aminoalkyl, C₁-alkylamino, di(C₁-alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkanoyl, C₁₋₄alkylaminoC₁₋₄alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy and a group -(-O-)_f(R^{b'})_gD (wherein f is 0 or 1, g is 0 or 1 and ring D is a C₃₋₆cycloalkyl group, an aryl or a 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo or C₁₋₄alkyl));
- 4) $-R^c X^4 R^{c'} X^5 R^{30}$ (wherein X^4 and X^5 which may be the same or different are each -O-, -C(O)-, -S-, -SO-, -SO-, -SO-, $-NR^{31}C(O)_s$ -, $-C(O)_x NR^{32}$ -, $-SO_2 NR^{33}$ -, $-NR^{34}SO_2$ or $-NR^{35}$ (wherein R^{31} , R^{32} , R^{33} , R^{34} and R^{35} each independently represents hydrogen, C_{1-3} alkyl, hydroxy C_{1-3} alkyl or C_{1-3} alkyl and s is 1 or 2) and R^{30} represents hydrogen, C_{1-3} alkyl, hydroxy C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl);
- 5) R³⁶ (wherein R³⁶ is a 4-6-membered cycloalkyl or saturated heterocyclic ring (linked via carbon or nitrogen) with 1-2 heteroatoms, selected independently from O, S and N,

which cycloalkyl or heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{1-4} alkyl, hydroxy C_{1-4} alkyl, cyano C_{1-4} alkyl, cyclopropyl, C_{1-4} alkylsulphonyl C_{1-4} alkyl, C_{1-4} alkoxycarbonyl, carboxamido, C_{1-4} aminoalkyl, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{1-4} alkylamino C_{1-4} alkyl, C_{1-4} alkylamino C_{1-4} alkyl)amino C_{1-4} alkyl, C_{1-4} alkylamino C_{1-4} alkoxy, di(C_{1-4} alkyl)amino C_{1-4} alkoxy, nitro, amino, C_{1-4} alkoxy, C_{1-4} hydroxyalkoxy, carboxy, trifluoromethyl, - $C(O)NR^{38}R^{39}$, - $NR^{40}C(O)R^{41}$ (wherein R^{38} , R^{39} , R^{40} and R^{41} , which may be the same or different, each represents hydrogen, C_{1-4} alkyl, hydroxy C_{1-4} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and a group -(-O-) $f(C_{1-4}$ alkyl)gringD (wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C_{3-6} cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C_{1-4} alkyl));

- 6) -R^dR³⁶ (wherein R³⁶ is as defined hereinbefore);
- 7) ReR36 (wherein R36 is as defined hereinbefore);
- 8) -R^f R³⁶ (wherein R³⁶ is as defined hereinbefore);
- 9) R³⁷ (wherein R³⁷ represents a pyridone group, a phenyl group or a 5-6-membered aromatic heterocyclic group (linked via carbon or nitrogen) with 1-3 heteroatoms selected from O, N and S, which pyridone, phenyl or aromatic heterocyclic group may carry up to 5 substituents selected from hydroxy, nitro, halogeno, amino, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄hydroxyalkyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, C₁₋₄hydroxyalkoxy, oxo, cyanoC₁₋₄alkyl, cyclopropyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, C₁₋₄alkanoyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkylaminoC₁₋₄alkyl, craboxy, carboxamido, trifluoromethyl, cyano, -C(O)NR³⁸R³⁹, -NR⁴⁰C(O)R⁴¹ (wherein R³⁸, R³⁹, R⁴⁰ and R⁴¹, which may be the same or different, each represents hydrogen, C₁₋₄alkyl, hydroxyC₁₋₄alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and a group -(-O-)₁(C₁₋₄alkyl)_gringD (wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C₁₋₄alkyl));
- 10) -R^gR³⁷ (wherein R³⁷ is as defined hereinbefore);
- 11) -RhR37 (wherein R37 is as defined hereinbefore);

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- 12) -Rⁱ R³⁷ (wherein R³⁷ is as defined hereinbefore);
- 13) $-R^{j} X^{6} R^{37}$ (wherein X^{6} represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -OC(O)-,
- -NR⁴²C(O)-, -C(O)NR⁴³-, -SO₂NR⁴⁴-, -NR⁴⁵SO₂- or -NR⁴⁶- (wherein R⁴², R⁴³, R⁴⁴, R⁴⁵ and R⁴⁶ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore);
- 14) $-R^k X^7 R^{37}$ (wherein X^7 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -NR⁴⁷C(O)-, -C(O)NR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹- (wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore);
- 15) -R^mX⁸R³⁷ (wherein X⁸ represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -NR⁵²C(O)-, -C(O)NR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶- (wherein R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore);
- 16) $-R^n X^9 R^n R^{37}$ (wherein X^9 represents -O-, -C(O)-, -S-, -SO-, -SO₂-, -NR⁵⁷C(O)-, -C(O)NR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹- (wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, C₁₋₃alkyl, hydroxyC₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore);
- 17) -R^p X⁹-R^p'R³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore);
- 18) C₂₋₅alkenyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C₁₋₄alkylamino, carboxy [[(]]and particularly—alkyl esters thereof,[[)]] N,N-di(C₁₋₄alkyl)amino, aminosulphonyl, N-C₁₋₄alkylaminosulphonyl and N,N-di(C₁₋₄alkyl)aminosulphonyl;
- 19) C₂₋₅alkynyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro, amino, C₁₋₄alkylamino,
- $\underline{N},\underline{N}$ -di(C_{14} alkyl)amino, aminosulphonyl, \underline{N} - C_{14} alkylaminosulphonyl and $\underline{N},\underline{N}$ -di(C_{14} alkyl)aminosulphonyl;
- 20) -R^tX⁹R^t'R³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore);
- 21) -R^u X⁹ R^u'R³⁶ (wherein X⁹ and R³⁶ are as defined hereinbefore); and
- 22) $R^v R^{62}(R^{v'})_q(X^9)_r R^{63}$ (wherein X^9 is as defined hereinbefore, q is 0 or 1, r is 0 or 1, and R^{62} is a C_{1-3} alkylene group or a cyclic group selected from cyclopropylene, cyclobutylene, cyclopentylene, cyclohexylene or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C_{1-3} alkylene

group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C₁₋₄cyanoalkyl, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl, C₁₋₄alkylsulphonylC₁₋₄alkyl, C₁₋₄alkoxycarbonyl, C₁₋₄aminoalkyl, C_{14} alkylamino, di(C_{14} alkyl)amino, C_{14} alkylamino C_{14} alkyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkylaminoC₁₋₄alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy and a group -(-O-)_f(C₁₋₄alkyl)_oringD (wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C₁₋₄alkyl); and R⁶³ is hydrogen, C₁₋₃alkyl, or a cyclic group selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and a 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, cyano, C_{14} cyanoalkyl, C_{14} alkyl, C_{14} hydroxyalkyl, C_{14} alkoxy, C_{14} alkoxy C_{14} alkyl, C_{1.4}alkylsulphonylC_{1.4}alkyl, C_{1.4}alkoxycarbonyl, C_{1.4}aminoalkyl, C_{1.4}alkylamino, di(C₁₋₄alkyl)amino, C₁₋₄alkylaminoC₁₋₄alkyl, di(C₁₋₄alkyl)aminoC₁₋₄alkyl, C₁₋₄alkylaminoC₁₋₄alkoxy, di(C₁₋₄alkyl)aminoC₁₋₄alkoxy and a group -(-O-)_f(C₁₋₄alkyl)_gringD (wherein f is 0 or 1, g is 0 or 1 and ring D is a cyclic group selected from C₃₋₆cycloalkyl, aryl or 5-6-membered saturated or unsaturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which cyclic group may bear one or more substituents selected from halo and C₁₋₄alkyl)); and wherein Ra, Rb, Rb, Rc, Rc, Rc, Rd, Rg, Rj, Rn, Rn, Rp, Rp, Rp, Rt, Rt, Ru, Rv and Rv are independently selected from C₁₋₈alkylene groups optionally substitued by one or more substituents selected from hydroxy, halogeno, amino[[,]]; R^e R^h, R^k and R^t are independently selected from C₂₋₈alkenylene groups optionally substituted by one or more substituents selected from hydroxy, halogeno, amino, and R^t may additionally be a bond;

6. (Currently Amended) The methoduse according to any one of the preceding claims 1 wherein in the compound of formula (I), R¹, R², R³, R⁴ are independently selected from, halo, cyano, nitro, trifluoromethyl, C₁₋₃alkyl, -NR¹³R¹⁴ (wherein R¹³ and R¹⁴, which may be the same or different, each represents hydrogen or C₁₋₃alkyl), or -X¹R¹⁵ (wherein X¹ represents a direct bond, -O-, -CH₂-, -OCO-, carbonyl, -S-, -SO-, -SO₂-, -NR¹⁶CO-, -CONR¹⁶-, -SO₂NR¹⁶-, -NR¹⁷SO₂- or -NR¹⁸- (wherein R¹⁶, R¹⁷ and R¹⁸ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl), and R¹⁵ is selected from one of the following groups:

- 1') hydrogen or C₁₋₅alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro or amino;
- 2') C₁₋₅alkylX²COR¹⁹ (wherein X² represents -O- or -NR²⁰ (in which R²⁰ represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R¹⁹ represents C₁₋₃alkyl, -NR[[1]]²¹R²² or -OR²³ (wherein R²¹, R²² and R²³ which may be the same or different each represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl));
- 3') C₁₋₅alkylX³R²⁴ (wherein X³ represents -O-, -S-, -SO-, -SO₂-, -OCO-, -NR²⁵CO-, -CONR²⁶-, -SO₂NR²⁷-, -NR²⁸SO₂- or -NR²⁹- (wherein R²⁵, R²⁶, R²⁷, R²⁸ and R²⁹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R²⁴ represents hydrogen, C₁₋₃alkyl, cyclopentyl, cyclohexyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl and C₁₋₄alkoxy);
- 4') $C_{1.5}$ alkyl X^4 $C_{1.5}$ alkyl X^5 R^{30} (wherein X^4 and X^5 which may be the same or different are each -O-, -S-, -SO-, -SO₂-, -NR³¹CO-, -CONR³²-, -SO₂NR³³-, -NR³⁴SO₂- or -NR³⁵- (wherein R^{31} , R^{32} , R^{33} , R^{34} and R^{35} each independently represents hydrogen, $C_{1.3}$ alkyl or $C_{1.3}$ alkoxy $C_{2.3}$ alkyl) and R^{30} represents hydrogen or $C_{1.3}$ alkyl);
- 5') R³⁶ (wherein R³⁶ is a 5-6-membered saturated heterocyclic group (linked via carbon or nitrogen) with 1-2 heteroatoms, selected independently from O, S and N, which heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl and C₁₋₄alkylsulphonylC₁₋₄alkyl);
- 6') C_{1.5}alkylR³⁶ (wherein R³⁶ is as defined in (5') above);

- 7') C₂₋₅alkenylR³⁶ (wherein R³⁶ is as defined in (5') above);
- 8') C2-5alkynylR³⁶ (wherein R³⁶ is as defined in (5') above);
- 9') R³⁷ (wherein R³⁷ represents a pyridone group, a phenyl group or a 5-6-membered aromatic heterocyclic group (linked via carbon or nitrogen) with 1-3 heteroatoms selected from O, N and S, which pyridone, phenyl or aromatic heterocyclic group may carry up to 5 substituents on an available carbon atom selected from hydroxy, halogeno, amino, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄hydroxyalkyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, C₁₋₄hydroxyalkoxy, carboxy, trifluoromethyl, cyano, -CONR³⁸R³⁹ and -NR⁴⁰COR⁴¹ (wherein R³⁸, R³⁹, R⁴⁰ and R⁴¹, which may be the same or different, each represents hydrogen, C₁₋₄alkyl or C₁₋₃alkoxyC₂₋₃alkyl));
- 10') C₁₋₅alkylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 11') C₂₋₅alkenylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 12') C₂₋₅alkynylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 13') C₁₋₅alkylX⁶R³⁷ (wherein X⁶ represents -O-, -S-, -SO-, -SO₂-, -NR⁴²CO-, -CONR⁴³-, -SO₂NR⁴⁴-, -NR⁴⁵SO₂- or -NR⁴⁶- (wherein R⁴², R⁴³, R⁴⁴, R⁴⁵ and R⁴⁶ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore);
- 14') C_{2-5} alkenyl X^7R^{37} (wherein X^7 represents -O-, -S-, -SO-, -SO₂-, -NR⁴⁷CO-, -CONR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹- (wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and R^{37} is as defined in (9') above);
- 15') C_{2-5} alkynyl X^8R^{37} (wherein X^8 represents -O-, -S-, -SO-, -SO₂-, -NR⁵²CO-, -CONR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶- (wherein R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and R^{37} is as defined hereinbefore);
- 16') C_{1-3} alkyl X^9 C_{1-3} alkyl R^{37} (wherein X^9 represents -O-, -S-, -SO-, -SO₂-, -NR⁵⁷CO-, -CONR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹- (wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl) and R^{37} is as defined hereinbefore); and
- 17') $C_{1\text{--}3}$ alkyl $X^9C_{1\text{--}3}$ alkyl R^{36} (wherein X^9 and R^{36} are as defined in (5') above).

7. (Currently Amended) The <u>methoduse</u> according to any one of the preceding claims 6 wherein in the compound of formula (I), R¹ is hydrogen and R⁴ is hydrogen, halo, C₁₋₄ alkyl or C₁₋₄alkoxy.

- 8-9. (Cancelled)
- 10. (Currently Amended) The methoduse according to any one of the preceding claims 5 wherein in the compound of formula (I), R³ is a group X¹R¹⁵ where X¹ is oxygen and R¹⁵ is a group (1), (3), (6), (10) or (22) as defined in claim 5 includes a methylene group directly adjacent X¹.
- 11. (Cancelled)
- 12. (Currently Amended) The <u>methoduse</u> according to <u>any one of the preceding-claims 6</u> wherein in the compound of formula (I), R⁵ is a group NHC(O)R⁹ or NHS(O)₂R⁹, where R⁹ is <u>selected from hydrogen</u>, optionally <u>substituted hydrocarbyl and optionally</u> substituted heterocyclylas defined in claim 1.
- 13. (Currently Amended) The methoduse according to any one of claims 61 to 11 wherein in the compound of formula (I), R⁵ is a group C(O)R⁹, C(O)OR⁹, S(O)R⁹, S(O)OR⁹, S(O)OR⁹, S(O)OR⁹, S(O)OR¹⁰, S(O)ONR¹⁰R¹¹ or S(O)ONR¹⁰R¹¹ where R⁹, R¹⁰ and R¹¹ are independently selected from hydrogen, optionally substituted hydrocarbyl and optionally substituted heterocyclyl and R¹⁰ and R¹¹ together with the nitrogen atom to which they are attached may additionally form an optionally substituted heterocyclic ring which optionally contains further heteroatomsas defined in claim 1.
- 14. (Currently Amended) The methoduse according to claim 12 or claim 13 wherein R⁹, R¹⁰ or R¹¹ are independently selected from aryl optionally substituted with one or more functional groups;
 - C₃₋₆cycloalkyl optionally substituted with one or more functional groups; aralkyl optionally substituted with one or more functional groups and wherein the aryl portion may further comprise one or more alkyl substituents;

heterocyclyl optionally substituted with one or more functional, alkyl, alkenyl or alkynyl groups;

alkyl optionally substituted by a functional group or a cycloalkyl or heterocyclyl group wherein the cycloalkyl or heterocyclyl group may themselves be optionally substituted with one or more functional or alkyl groups;

alkenyl optionally substituted by a functional group or an aryl or heterocyclyl group wherein the aryl or heterocyclyl group may be optionally substituted with one or more functional or alkyl groups; and

alkynyl optionally substituted by a functional group or an aryl or heterocyclyl group wherein the aryl or heterocyclyl group may be optionally substituted with one or more functional group or alkyl groups.

15-18. (Cancelled)

 (Currently Amended) A compound of formula (IIA) which comprises a compound of formula (II) as defined in claim 15

,____or a salt, ester, or amide or prodrug thereof,

where X is O, or S, S(O) or S(O)₂, or NR¹² where R¹² is hydrogen or C₁₋₆alkyl; Z is C(O) or S(O)₂

 R^{64} is optionally substituted hydrocarbyl or optionally substituted heterocyclyl R^{6} is hydrogen, optionally substituted hydrocarbyl or optionally substituted heterocyclyl; R^{7} and R^{8} are independently selected from hydrogen, halo, C_{1-4} alkoxy, C_{1-4} alkoxymethyl, $di(C_{1-4}$ alkoxy)methyl, C_{1-4} alkoxy

C₂₋₅alkenyl, C₂₋₅alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated (linked via a ring carbon or nitrogen atom) or unsaturated (linked via a ring carbon atom), and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C₂₋₄alkanoyl, C₁₋₄alkylsulphonyl, C₁₋₄alkoxycarbonyl, C₁₋₄alkylsulphanyl, C₁₋₄alkylsulphonyl, C₁₋₄alkylsulphonyl, aminosulphonyl, N-C₁₋₄alkylsulphonyl, N,N-di(C₁₋₄alkyl)aminosulphonyl, C₁₋₄alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C₁₋₄alkoxycarbonyl, and

R¹, R², R³, R⁴ are independently selected from halogeno, cyano, nitro,

C₁₋₃alkylsulphanyl, -N(OH)R¹³- (wherein R¹³ is hydrogen, or C₁₋₃alkyl), or R¹⁵X¹
(wherein X¹ represents a direct bond, -O-, -CH₂-, -OCO-, carbonyl, -S-, -SO-, -SO₂-,

-NR¹⁶CO-, -CONR¹⁶-, -SO₂NR¹⁶-, -NR¹⁷SO₂- or -NR¹⁸- (wherein R¹⁶, R¹⁷ and R¹⁸ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl), and R¹⁵ is hydrogen, optionally substituted hydrocarbyl, optionally substituted heterocyclyl or optionally substituted alkoxy;

provided that

- (i) where R¹, R⁴, R⁶, R⁷ and R⁸ are all hydrogen and R² and R³ are both hydrogen or both methoxy, R⁶⁴ is other than phenyl;
- (ii) where R^1 , R^4 , R^6 , R^7 and R^8 are all hydrogen and R^2 and R^3 are methoxy, and Z is C(O), R^{64} is other than methyl;
- (iii) where R^1 , $R^2[[^+]]$, R^3 , R^4 , R^6 , R^7 and R^8 are all hydrogen, X is oxygen, R^6 is 4-methyl -1-piperazinyl and Z is C(O)[[,]] and R^{64} is other than methyl.
- 20. (Currently Amended) A compound of formula (IIC)

as defined in claim 16 or a salt, ester or amide thereof, where X is O, or S, S(O) or S(O)₂ or NR⁸ where R⁸ is hydrogen or C_{1-6} alkyl; Z is C(O) or S(O)₂

R⁶⁴ is optionally substituted hydrocarbyl or optionally substituted heterocyclyl;

R⁷ and R⁸ are independently selected from hydrogen, halo, C₁₋₄alkyl, C₁₋₄ alkoxy, C₁₋₄alkoxymethyl, di(C₁₋₄alkoxy)methyl, C₁₋₄alkanoyl, trifluoromethyl, cyano, amino, C₂₋ 5alkenyl, C2-5alkynyl, a phenyl group, a benzyl group or a 5-6-membered heterocyclic group with 1-3 heteroatoms, selected independently from O, S and N, which heterocyclic group may be aromatic or non-aromatic and may be saturated (linked via a ring carbon or nitrogen atom) or unsaturated (linked via a ring carbon atom), and which phenyl, benzyl or heterocyclic group may bear on one or more ring carbon atoms up to 5 substituents selected from hydroxy, halogeno, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro, C2 4alkanoyl, C1-4alkanoylamino, C1-4alkoxycarbonyl, C1-4alkylsulphanyl, C₁4alkylsulphinyl, C₁4alkylsulphonyl, carbamoyl, N-C₁-4alkylcarbamoyl, N,N-di(C₁-4alkyl)carbamoyl, aminosulphonyl, N-C₁-4alkylaminosulphonyl, N,N-di(C14alkyl)aminosulphonyl, C14alkylsulphonylamino, and a saturated heterocyclic group selected from morpholino, thiomorpholino, pyrrolidinyl, piperazinyl, piperidinyl, imidazolidinyl and pyrazolidinyl, which saturated heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₃alkyl, C₁-3alkoxy, C₁₋₃alkanoyloxy, trifluoromethyl, cyano, amino, nitro and C₁₋₄alkoxycarbonyl, and

where R¹, R², R³ and R⁴ are independently selected from halo, cyano, nitro, trifluoromethyl, C₁₋₃alkyl, -NR¹³R¹⁴ (wherein R¹³ and R¹⁴, which may be the same or

different, each represents hydrogen or C_{1-3} alkyl), or $-X^1R^{15}$ (wherein X^1 represents a direct bond, -O-, -CH₂-, -OCO-, carbonyl, -S-, -SO-, -SO₂-, -NR¹⁶CO-, -CONR¹⁶-, -SO₂NR¹⁶-, -NR¹⁷SO₂- or -NR¹⁸- (wherein R¹⁶, R¹⁷ and R¹⁸ each independently represents hydrogen, C_{1-3} alkyl or C_{1-3} alkoxy C_{2-3} alkyl), and R¹⁵ is selected from one of the following groups:

- 1') hydrogen or C₁₋₅alkyl which may be unsubstituted or which may be substituted with one or more groups selected from hydroxy, fluoro or amino;
- 2') C₁₋₅alkylX²COR¹⁹ (wherein X² represents -O- or -NR²⁰ (in which R²⁰ represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R¹⁹ represents C₁₋₃alkyl, -NR²¹R²² or -OR²³ (wherein R²¹, R²² and R²³ which may be the same or different each represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl);
- 3') C₁₋₅alkylX³R²⁴ (wherein X³ represents -O-, -S-, -SO-, -SO₂-, -OCO-, -NR²⁵CO-, -CONR²⁶-, -SO₂NR²⁷-, -NR²⁸SO₂- or -NR²⁹- (wherein R²⁵, R²⁶, R²⁷, R²⁸ and R²⁹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R²⁴ represents hydrogen, C₁₋₃alkyl, cyclopentyl, cyclohexyl or a 5-6-membered saturated heterocyclic group with 1-2 heteroatoms, selected independently from O, S and N, which C₁₋₃alkyl group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno and C₁₋₄alkoxy and which cyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl and C₁₋₄alkoxy);
- 4') C₁₋₅alkylX⁴C₁₋₅alkylX⁵R³⁰ (wherein X⁴ and X⁵ which may be the same or different are each -O-, -S-, -SO-, -SO₂-, -NR³¹CO-, -CONR³²-, -SO₂NR³³-, -NR³⁴SO₂- or -NR³⁵- (wherein R³¹, R³², R³³, R³⁴ and R³⁵ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁰ represents hydrogen or C₁₋₃alkyl);
- 5') R³⁶ (wherein R³⁶ is a 5-6-membered saturated heterocyclic group (linked via carbon or nitrogen) with 1-2 heteroatoms, selected independently from O, S and N, which heterocyclic group may bear 1 or 2 substituents selected from oxo, hydroxy, halogeno, C₁₋₄alkyl, C₁₋₄hydroxyalkyl, C₁₋₄alkoxy, C₁₋₄alkoxyC₁₋₄alkyl and C₁₋₄alkylsulphonylC₁₋₄alkyl);

C₁₋₄arkyrsurpnonyrC₁₋₄arkyr);

6') C₁₋₅alkylR³⁶ (wherein R³⁶ is as defined in (5') above);

7') C₂₋₅alkenylR³⁶ (wherein R³⁶ is as defined in (5') above);

8') C₂₋₅alkynylR³⁶ (wherein R³⁶ is as defined in (5') above);

9') R³⁷ (wherein R³⁷ represents a pyridone group, a phenyl group or a 5-6-membered aromatic heterocyclic group (linked via carbon or nitrogen) with 1-3 heteroatoms selected from O, N and S, which pyridone, phenyl or aromatic heterocyclic group may carry up to 5 substituents on an available carbon atom selected from hydroxy, halogeno, amino, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄hydroxyalkyl, C₁₋₄aminoalkyl, C₁₋₄alkylamino, C₁₋₄hydroxyalkoxy, carboxy, trifluoromethyl, cyano, -CONR³⁸R³⁹ and -NR⁴⁰COR⁴¹ (wherein R³⁸, R³⁹, R⁴⁰ and R⁴¹, which may be the same or different, each represents hydrogen, C₁₋₄alkyl or C₁₋₃alkoxyC₂₋₃alkyl));

- 10') C₁₋₅alkylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 11') C₂₋₅alkenylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 12') C₂₋₅alkynylR³⁷ (wherein R³⁷ is as defined in (9') above);
- 13') C₁₋₅alkylX⁶R³⁷ (wherein X⁶ represents -O-, -S-, -SO₂-, -NR⁴²CO-, -CONR⁴³-, -SO₂NR⁴⁴-, -NR⁴⁵SO₂- or -NR⁴⁶- (wherein R⁴², R⁴³, R⁴⁴, R⁴⁵ and R⁴⁶ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore); 14') C₂₋₅alkenylX⁷R³⁷ (wherein X⁷ represents -O-, -S-, -SO-, -SO₂-, -NR⁴⁷CO-, -CONR⁴⁸-, -SO₂NR⁴⁹-, -NR⁵⁰SO₂- or -NR⁵¹- (wherein R⁴⁷, R⁴⁸, R⁴⁹, R⁵⁰ and R⁵¹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined in (9') above); 15') C₂₋₅alkynylX⁸R³⁷ (wherein X⁸ represents -O-, -S-, -SO-, -SO₂-, -NR⁵²CO-, -CONR⁵³-, -SO₂NR⁵⁴-, -NR⁵⁵SO₂- or -NR⁵⁶- (wherein R⁵², R⁵³, R⁵⁴, R⁵⁵ and R⁵⁶ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃alkoxyC₂₋₃alkyl) and R³⁷ is as defined hereinbefore); 16') C₁₋₃alkylX⁹C₁₋₃alkylR³⁷ (wherein X⁹ represents -O-, -S-, -SO-, -SO₂-, -NR⁵⁷CO-, -CONR⁵⁸-, -SO₂NR⁵⁹-, -NR⁶⁰SO₂- or -NR⁶¹- (wherein R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰ and R⁶¹ each independently represents hydrogen, C₁₋₃alkyl or C₁₋₃
- 17') C_{1-3} alky $1X^9C_{1-3}$ alky $1R^{36}$ (wherein X^9 and R^{36} are as defined in (5') above) provided that i) where R^1 , R^4 , R^7 and R^8 are all hydrogen and R^2 and R^3 are both hydrogen or both methoxy, R^{64} is other than phenyl; and
- (ii) where R^1 , R^4 , R^6 , R^7 and R^8 are all hydrogen and R^2 and R^3 are methoxy, and Z is C(O), R^{64} is other than methyl.

21-24. (Cancelled)

25. (Currently Amended) A compound according to any one of claims 2019 to 24 where X is NH.

- 26. (Cancelled)
- 27. (Currently Amended) A method for preparing a compound according to any one of claims 19 to 26, which method comprises reacting a compound of formula (VIII')

where R¹ is equivalent to the corresponding group of formula R¹ as defined in relation to the said compound of claims 19-to-26, or a precursor thereof;

R^{2"} is equivalent to the corresponding group of formula R² or R^{2'} or R⁶⁸ as defined in relation to the said compound of claims 19 to 26, or a precursor thereof;

R^{3"} is equivalent to the corresponding group of formula R³ or R³ or R⁶⁹ as defined in relation to the said compound of claims 19-to 26, or a precursor thereof;

R^{4'} is equivalent to the corresponding group of formula R⁴ as defined in relation to the said compound of claims 19-to-26, or a precursor thereof;[[,]]

R⁶ is a group R⁶ where present in the compound of any one of claims <u>1918 to 26 or is</u> hydrogen where absent, and R⁸⁵ is a leaving group, with a compound of formula (IX')

(IX')

where X, R⁷ and R⁸ are as defined in relation to the relevant compound according to any one of claims 19 to 26, and R⁸⁶ is a group of formula NHZR⁶⁴ or Y(O)R⁶⁵ where Z and, R⁶⁴, Y and R⁶⁵ as are defined in the relation to the said compound in any one of claims 19 to 26; and thereafter if desired or necessary converting a group R¹, R², R³ or R⁴ to a group R¹, R² or R² or R⁶⁸, R³ or R³ or R⁶⁹ and R⁴ respectively or to a different such group.

- 28. (Cancelled)
- 29. (Currently Amended) A compound of the formula (IIA), (IIB) or (VIA) as defined in claim 19, or claim 20 or claim 23 respectively, or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester, or amide or prodrug thereof, or a compound of formula (IIC), (IID) of (VIB) as defined in claim 21, 22 or 24 respectively, or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester, or amide thereof, for use in a method of treatment of the human or animal body by therapy.
- 30. (Currently Amended)A pharmaceutical composition comprising a compound of formula (IIA), (IIB) or (VIA) as defined in claim 19, or claim 20 or claim 23 respectively, or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester, or amide or prodrug thereof, or a compound of formula (IIC), (IID) of (VIB) as defined in claim 21, 22 or 24 respectively, or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester, or amide thereof, in combination with at pharmaceutically acceptable carrier.
- 31. (Cancelled)
- 32. (New) The method according to claim 14, wherein R⁹, R¹⁰ or R¹¹ are: optionally substituted aryl selected from phenyl optionally substituted with up to 5 groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁₋₁₀alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, nitro or C₁₋₄alkyl;

optionally substituted C_{3.6}cycloalkyl selected from optionally substituted cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl any of which may be optionally substituted with nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁₋₁₀alkyl, arC₁. ₁₀alkyloxy, or aryl wherein aryl rings in the substituents may themselves be substituted with halo, nitro or C₁₋₄alkyl; optionally substituted arC₁₋₁₀alkyl selected from optionally substituted benzyl, phenylethyl or phenylpropyl, wherein the phenyl ring is optionally substituted with up to 5 groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁-₁₀alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, carboxy, trifluoromethyl, nitro or C₁₋₄alkyl; optionally substituted heterocyclyl selected from pyridyl, pyrazine, pyrimidinyl, pyrrolidino, furyl, tetrahydrofuryl, oxazolyl, morpholino, thiadiazole, indolyl, quinolinyl, isoquinolinyl, pyrazolyl, methylenedioxybenzyl, thiophene and benzothiophene, all of which may be optionally substituted with one or more groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁₋₁₀alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, carboxy, trifluoromethyl, nitro or C₁₋₄alkyl; optionally substituted C_{1-10} alkyl where optional substituents for C_{1-10} alkyl include amino, mono- or di-C_{1.4}alkylamino, hydroxy, C_{1.4}alkoxy, heterocyclyl (selected from thiophene, tetrahydrothiophene-1,1-dioxide, pyrrolidino, morpholino, furyl and tetrahydrofuryl), C₁. 4alkoxy, acetamido, aryloxy, alkylC₁₋₄thio, aroyl where the aryl ring may itself be substituted with halo, carboxy, trifluoromethyl, nitro, carboxy or trifluoromethyl, C₃-10cycloalkyl or C₃₋₁₀cycloalkenyl; or optionally substituted C₂₋₁₀alkenyl or C₂₋₁₀alkynyl where optional substituents for C₂. 10alkenyl or C₂₋₁₀alkynyl include nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, ar C_{1-10} alkyl, or ar C_{1-10} alkyloxy wherein aryl rings in the substituents

may themselves be substituted with halo, carboxy, trifluoromethyl nitro or C₁₋₄alkyl; or

such groups are substituted by aryl, where the aryl ring may itself be substituted with halo, nitro, carboxy, trifluoromethyl.

33. (New) A compound according to claim 20, or a salt, ester or amide thereof, where X, Z, R¹, R², R³, R⁴, R⁷ and R⁸ are as defined in claim 20, and R⁶⁴ is optionally substituted aryl selected from phenyl optionally substituted with up to 5 groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C14alkylsulphonyl, trifluoromethyl, arC1. 10alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, nitro or C₁₋₄alkyl; optionally substituted C₃₋₆cycloalkyl selected from optionally substituted cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl any of which may be optionally substituted with nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁₋₁₀alkyl, arC₁₋ 10alkyloxy, or aryl wherein aryl rings in the substituents may themselves be substituted with halo, nitro or C₁₋₄alkyl; optionally substituted arC₁₋₁₀alkyl selected from optionally substituted benzyl, phenylethyl or phenylpropyl, wherein the phenyl ring is optionally substituted with up to 5 groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁. ₁₀alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, carboxy, trifluoromethyl, nitro or C₁₋₄alkyl; optionally substituted heterocyclyl selected from pyridyl, pyrazine, pyrimidinyl, pyrrolidino, furyl, tetrahydrofuryl, oxazolyl, morpholino, thiadiazole, indolyl, quinolinyl, isoquinolinyl, pyrazolyl, methylenedioxybenzyl, thiophene and benzothiophene, all of which may be optionally substituted with one or more groups selected from nitro, halo, carboxy, cyano, C₁₋₄alkyl, C₁₋₄alkoxy, C₁₋₄alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C₁₋₄alkylsulphonyl, trifluoromethyl, arC₁₋₁₀alkyl, or arC₁₋₁₀alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, carboxy, trifluoromethyl, nitro or C₁₋₄alkyl; optionally substituted C_{1-10} alkyl where optional substituents for C_{1-10} alkyl include amino, mono- or di-C₁₋₄alkylamino, hydroxy, C₁₋₄alkoxy, heterocyclyl (selected from thiophene,

tetrahydrothiophene-1,1-dioxide, pyrrolidino, morpholino, furyl and tetrahydrofuryl), C_{1-4} alkoxy, acetamido, aryloxy, alkyl C_{1-4} thio, aroyl where the aryl ring may itself be substituted with halo, carboxy, trifluoromethyl, nitro, carboxy or trifluoromethyl, C_{3-10} cycloalkyl or C_{3-10} cycloalkenyl; or optionally substituted C_{2-10} alkenyl or C_{2-10} alkenyl or C_{2-10} alkenyl or C_{2-10} alkynyl include nitro, halo, carboxy, cyano, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} alkylthio, acetoxy, acetamido, hydroxy, aminosulphonyl, C_{1-4} alkylsulphonyl, trifluoromethyl, ar C_{1-10} alkyl, or ar C_{1-10} alkyloxy wherein aryl rings in the substituents may themselves be substituted with halo, carboxy, trifluoromethyl nitro or C_{1-4} alkyl; or such groups are substituted by aryl, where the aryl ring may itself be substituted with halo, nitro, carboxy, trifluoromethyl.

- 34. (New) A compound according to claim 20, wherein R⁶⁴ is phenyl, 2-furan,
 - (E)-CH=CH-phenyl, 3,4,5-trimethoxyphenyl, 2,4-difluorophenyl,
 - 2-nitro-4,5-dimethoxyphenyl, 2,4-dinitrophenyl, 2-fluorobenzyl, cyclopentyl,
 - 1-methylbut-3-enyl, CH₂CN, n-heptyl, 2-(methylthio)ethyl, 2-ethoxyethyl, C(CH₃)=CH₂,
 - 5-methyl-2-pyrazine, 3-furyl, 3-cyanophenyl, 4-acetoxyphenyl,
 - 2-nitro-3-methoxyphenyl, 2-methylthiophenyl, 3-acetoxyphenyl,
 - 4-aminosulphonyl-1-hydroxy-2-naphthyl, 2-pyridyl, 2-quinolinyl,
 - 1,5-dimethyl-1H-pyrazolyl, 2-fluoro-5-nitrophenyl, 3-pyridyl, 2-chloro-3-pyridyl,
 - 2-fluorophenyl, 2,3-difluorophenyl, 2,5-difluorophenyl, 2,3-dimethoxyphenyl,
 - 3,5-dimethoxy-4-hydroxy-phenyl, 3-chloro-4-carboxyphenyl,
 - 3-nitro-4-(methylsulphonyl)-phenyl, 3-nitro-4-methoxyphenyl,
 - (E)-CH=CH-(2-nitrophenyl), (E)-CH=CH-(3-nitrophenyl), (E)-CH=CH-(4-nitrophenyl),
 - (E)-CH=CH-(4-chlorophenyl), (E)-CH=CH-(2,3,4-trifluoro-phenyl),
 - (E)-CH=CH-(3-(trifluoromethyl)phenyl), (E)-CH=CH-(4-fluorophenyl), 2-indolyl,
 - 5-fluoro-2-indolyl, 3-fluorophenyl, 3,5-dinitrophenyl, 3-(trifluoromethyl)benzyl,
 - 3-fluorobenzyl, 4-chlorobenzyl,
 - 4-methoxybenzyl, 4-(iso-propyl)benzyl, 3-nitrobenzyl, 2-phenoxyethyl,
 - 2-(3,4-dimethoxyphenyl)ethyl, 2-(4-chlorobenzoyl)ethyl, 3-chloro-1-propyl

- 3-phenoxy-1-propyl, 3-phenyl-1-propyl, 3-benzoylpropyl, dec-9-enyl,
- 1-methylbut-1-enyl, (2-thiophene)methyl, (3-thiophene)methyl,
- 2-(3-nitro-4-hydroxyphenyl)ethyl, 3,5-difluorobenzyl, 4-phenylbenzyl,
- 3,4-methylenedioxybenzyl, 2,6-difluorobenzyl, 4-(n-butoxy)benzyl, 3-methyl-1-butyl pent-4-ynyl, 3-phenoxybenzyl, 3-(5-bromo-4-methoxy)thiophene,
- 3-(5-chloro-4-methoxy)-thiophene, 3-methoxy-4-ethoxybenzyl, 4-(benzyloxy)benzyl
- 3-(2-thiophene)propyl, hex-5-ynyl, 1-(4-chlorophenyl)cyclopropyl, cyclopentylmethyl,
- 2-(cyclopentyl)ethyl, cyclohexylmethyl, 2-(cyclohexyl)ethyl, 3-(cyclohexyl)propyl
- 1-phenoxyethyl, (E)-C(CH₃)=CH-phenyl, 2-chloro-5-nitrophenyl, methyl, n-heptyl
- 2-furyl, 3-furyl, (2-thiophene)methyl, 2-indolyl, 2,4-difluorophenyl,
- (3-nitro-4-(methylsulphonyl))-phenyl, pent-4-ynyl,
- 5-methyl-2-pyrazinyl, cyclopentyl, (cyclohexyl)methyl, 3-nitro-4-methoxyphenyl,
- 2-tetrahydrofuryl, 2-pyridyl, 3-pyridyl, (E)-CH=CH-(4-nitrophenyl),
- 1,5-dimethyl-pyrazol-3-yl, cyclobutyl, 2-methoxyphenyl, 3-nitrophenyl, 4-nitrophenyl
- cyclohexyl, 4-nitropyrrol-2-yl, 3-nitro-4-methylphenyl, 3-nitro-4-fluorophenyl,
- (3-thiophene)methyl, 3-chloro-2-benzothiophene, 5-chloro-2-indolyl, (1-piperidine)ethyl,
- 3,4-methylenedioxyphenyl, but-3-ynyl, 3-cyanophenyl, 2-(acetamido)ethyl,
- 4-(trifluoromethyl)phenyl, 3-chloro-4-fluorophenyl, 4-fluoro-3-(trifluoromethyl)-phenyl,
- 4-fluorophenyl, 5-bromo-2-thiophene, 4-methoxyphenyl, 6-methyl-3-pyridyl,
- 5-nitro-2-furyl, 2-nitrophenyl, (E)-CH=CH-(3-chlorophenyl), 2-thiophene, cyclopropyl, -methylphenyl
- 2-chlorophenyl, 2-fluorophenyl, 2,5-dichlorophenyl, 3-fluorophenyl, 6-chloro-3-pyridyl,
- 5-bromo-2-furyl, 3-nitro-2-methylphenyl, 3-chlorophenyl,
- 3-(tetrahydrothiophene-1-1'-dioxide)methyl, 2-methoxyethyl, 2-(methylthio)phenyl.
- 35. (New) A compound according to claim 20, where R⁶⁴ is phenyl or halosubstituted phenyl.
- 36. (New) A compound according to claim 33, where R¹ is hydrogen and R⁴ is halo, C₁.

 4alkyl or C_{1.4}alkoxy.
- 37. (New) A compound according to claim 33, where X^1 is oxygen.

38. (New) A compound according to claim 33, where R¹⁵ is selected from a group (1'), (3'), (6') or (10') as defined in claim 1.

- 39. (New) A compound according to claim 33, where R⁷ and R⁸ are independently selected from hydrogen, halo, C₁₋₄alkoxy, cyano, trifluoromethyl or phenyl.
- 40. (New) An *in vivo* hydrolysable ester of a compound according to claim 33, which is a phosphate ester.